

ABSTRACT

5 A novel method and apparatus for controlling forward link power when an
intergenerational soft handoff is performed in CDMA communication system is
disclosed. The forward link power control method and apparatus of the present
invention determines acceptable forward link power levels for a selected target base
station during intergenerational soft handoff (ISHO) procedures. The method and
apparatus of the present invention controls the forward link power for the selected
target base station during an ISHO procedure. Open loop and slow forward power
10 control embodiments of the present invention rely upon an observation that
information regarding a mobile station serving forward traffic channel can be
communicated to the selected target base station using an MSC. In another
embodiment, a statistical value can be used to determine a forward link transmit
power of a selected target base station. The RTC demodulation embodiment controls
15 forward link transmit power of a target base station by directly demodulating an RTC
or FPCC of a mobile station and obtaining power control commands. The method and
apparatus of the present invention improves the performance, increases the Quality of
Service (QoS), and improves the capacity of CDMA communication systems during
complete intergenerational handoff procedures.